

DAEN-ECE-G

DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, D. C. 20314

ETL 1110-1-125

Engineer Technical
Letter 1110-1-125

4 May 1984

Engineering and Design
GUIDANCE FOR FUEL RESISTANT SEALERS FOR PAVEMENTS

1. Purpose. This letter furnishes guidance on use of fuel resistant sealers for bituminous concrete pavements.

2. Applicability. This letter applies to all HQUSACE/OCE elements and all field operating activities having Military Construction design responsibility.

3. Discussion.

a. In addition to the rubberized-tar slurry seals recommended for fuel resistant surfacings in Para 9.6 of TM 5-825-2 other materials are now on the market. Some of these materials have been evaluated by WES and test results and conclusions are contained in the Draft Report "Fuel Resistant Sealers" (Incl 1).

b. Some of the numerous materials marketed as fuel resistant sealers are costly (approximately \$20/gal) and others are relatively inexpensive (approximately \$2/gal). Experience has shown that some perform satisfactorily and others do not. The initial least/first cost of sealers is not always a good measure of the cost since some of the less costly perform for a short time while the more expensive may perform for extended periods (several years).

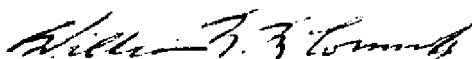
c. The Waterways Experiment Station has developed a test procedure (Incl 2) for evaluating the quality of fuel resistant sealers in the laboratory. This procedure involves dripping fuel on the sealed asphaltic concrete surface, conducting an abrasion test and evaluating the damage. This test procedure evaluates the effects of fuel and traffic but it does not evaluate long term performance as affected by changes of sealer properties with time and temperature.

4. Action To Be Taken. Use of sealer materials now available should be based on conformance with laboratory test performance developed by WES, lowest life cycle costs, satisfactory application according to manufacturer's specification and satisfactory performance records. Materials not meeting these requirements should not be selected for use.

5. Implementation. This letter will have routine application for Military Construction as defined in Para 6c, ER 1110-345-100.

FOR THE COMMANDER:

2 Incl
as



WILLIAM N. MCCORMICK, JR.
Chief, Engineering Division
Directorate of Engineering & Construction